

SYSTEM AND METHOD FOR PATTERN IDENTIFICATION

ABSTRACT OF THE DISCLOSURE

5 A system and method for pattern identification are disclosed. According to one embodiment of the present invention, the method for locating a pattern includes the steps of (1) providing a pattern image corresponding to the pattern to be located; (2) extracting a pattern contour from the pattern image; (3) generating vector information for the pattern contours,
10 relative to a reference point; (4) creating a reference table for storing the vector information, the reference tables corresponding to the pattern contour; (5) providing a scene image, which will be searched for the pattern; (6) extracting a scene contour from the scene image; (7) generating vector information for the scene contours; and (8) determining whether the pattern has been located within the scene image using the reference table and the vector information for the scene
15 contour. According to another embodiment, a system includes a first image capture device that captures a pattern image which includes an image of a pattern; a second image capture device that captures a scene image to be searched for the pattern; a processor for processing the images, which includes means for extracting at least one pattern contour from the pattern image; means for generating vector information for each of said at least one pattern contours, relative to a
20 reference point; means for creating at least one reference table for storing vector information, each of said at least one reference tables corresponding to at least one pattern contour; means for extracting at least one scene contour from a scene image; means for generating vector information for each of said at least one scene contours; and a means for locating the pattern image within the scene image using the at least one reference tables and the vector information
25 for the at least one scene contours.